## Remarks

Claims 1 to 7 were previously pending. Claims 1 and 3 have been objected to under 35 U.S.C. 112, 2<sup>nd</sup> paragraph. Claims 5 and 6 have been rejected under 35 U.S.C. 101 for claiming non-statutory subject matter. Claims 1, 3, 4, 6 and 7 have been rejected under 35 U.S.C. 102(e) as being anticipated Van Wiggerren et al. Claim 5 has been rejected under 35 U.S.C. 102(e) as being anticipated by United States Patent No. 6,606,158 (Rosenfeldt et al). Claim 2 has been objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The claims of the application have been amended to overcome the objections of the Examiner and to better define the invention in view of the prior art. In particular, claim 1 has been amended to include the features of claim 2, and to eliminate the term "polarized" from the second clause, thereby placing claim 1 in condition for allowance in accordance with the Examiner's suggestions, for which the Applicant is grateful. Additional minor amendments have been made to claim 1 to place it in a more easily readable form by the correction of typographical errors and the elimination of potentially vague terms, such as "whose" and "its".

Claims 2 and 5 have been cancelled. Claim 3 has been amended to correct the typographical error detailed by the Examiner, and to include Markush-style phraseology. Minor formal changes have been made to claim 4 to ensure consistency with the previous claims. Accordingly, reconsideration of the 35 U.S.C. 112, 2<sup>nd</sup> paragraph, rejection is hereby requested.

Claims 6 and 7 have been amended to define the N sub-beams as "at least four sub-beams", in accordance with paragraphs 29 and 42, which disclose the use of "multiple" and "a larger number of" polarization states. Moreover, claims 6 and 7 have been amended to define that PDL and PMD measurements are determined from the beat frequencies at the different polarization states, thereby providing a practical application

for the method and apparatus defined therein to overcome the 35 U.S.C. 101 rejection.

Accordingly, reconsideration of the 35 U.S.C. 101 rejection is hereby requested.

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New claims 8 to 14 have been added to ensure all aspects of the invention are protected.

No new subject matter has been added. Support for claims 8, 10 and 13 can be found in

original claim 2 and Paragraph 31. Support for claim 8 can be found in Paragraph 31, 37

and 40, inter alia. Support for claims 11 and 14 can be found in Paragraphs 36 and 37.

The method taught by Van Wiggerren et al utilizes only two sub-beams and requires two

detectors, whereas the present invention utilizes at least four sub-beams, but only requires

a single detector. Moreover, the Van Wiggerren et al method is an approximation that

assumes that the PMD and the PDL are independent of wavelength, which enables the

simple aforementioned apparatus to be used, but precludes the calculation of second

order PMD. The present invention does not make the aforementioned assumption, and in

fact requires that at least four polarization states are measured resulting in a more

accurate measurement of PMD or PDL, with relatively little added cost.

Applicant respectfully requests reconsideration of this application.

Should any minor informalities need to be addressed, the Examiner is encouraged to

contact the undersigned attorney at the telephone number listed below.

The Commissioner is hereby authorized to charge any fees which may be required, or credit

any overpayment, to Deposit Account No: 50-1465.

Please associate this application with Customer No: 24949.

Respectfully,

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